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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,300	01/16/2002	Syuuji Matsuura	0033-0785P	2317

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EXAMINER

LAMBRECHT, CHRISTOPHER M

ART UNIT PAPER NUMBER

2623

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/046,300

Applicant(s)

MATSUURA, SYUUJI

Examiner

Chris Lambrecht

Art Unit

2623

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 28 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): The rejection of claim 7 under 35 U.S.C. 112, 1st paragraph.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.

Continuation of 3. NOTE: The amendments to claim 7 introduce new limitations requiring further search or consideration.

Continuation of 11:

In the reply, Applicant requests reconsideration and allowance of claims 1 and 7. Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Analog Devices, Inc. (of record) in view of Tam (of record). Claim 7 stands rejected under the same statute over Vorenkamp (of record) in view of Analog Devices, Inc., and further in view of Tam. Applicant submits the combination of Analog Devices, Inc. and Tam is improper because the proposed modification would render the prior art unfit for its intended purpose. Specifically, Applicant asserts that substituting the differential-output power-amplifier of Analog Devices, Inc. with the single-ended-output transimpedance stage of Tam would change the output function of the component disclosed in Analog Devices, Inc.

Applicant's arguments are unconvincing for at least two reasons: First, the combined teachings of Analog Devices, Inc. and Tam do not suggest the direct substitution of Analog Device, Inc.'s power amp with Tam's transimpedance stage. Second, even if the combined teachings of Analog Devices, Inc. and Tam were limited to such a substitution, the modification would not render the prior art unfit for its intended purpose.


Regarding the first issue, The power amplifier disclosed by Analog Devices, Inc. constitutes an output-stage that receives differential input currents and amplifies these currents to the appropriate level necessary to drive a 75-ohm load. The appropriate levels of amplification are determined by a specified voltage gain between the AD8322's input and output terminals. The output-stage power-amplifier further comprises a reverse buffer for selectively isolating the AD8322 and the load.

Similarly, Tam discloses an output stage that receives differential input currents and amplifies them appropriately to achieve a specified voltage gain between the output stage's input and output terminals. Tam's output stage comprises a transimpedance stage and a forward buffer, each of which provides power gain to the input signal. The output stage further comprises a reverse buffer for load isolation as described in Analog Devices, Inc.

The teachings of Tam are not limited to the single-ended-output transimpedance stage disclosed in the preferred embodiment. Rather, Tam teaches the arrangement of components in a reverse-buffer output stage as disclosed in Analog Devices, Inc. Furthermore, Tam expressly indicates that the particular implementation used for the transimpedance stage, forward buffer, and reverse buffer are not limited to the configurations disclosed therein; other implementations of these circuit units could be employed [see col. 9, lines 6-19]. One of ordinary skill in the art would have recognized the arrangement disclosed at figure 1 of Tam could be employed using differential outputs.

Alternatively, the differential outputs provided by the output stage of Analog Devices, Inc. could also be achieved by two instances of the preferred embodiment of Tam using complimentary input configurations. Indeed, Tam indicates that a typical implementation of the preferred embodiment would include several identical instances of the disclosed arrangement in a larger circuit [see col. 4, lines 65-67].

Regarding the second issue, the intended purpose of Analog Devices, Inc.'s AD8322 is to provide digitally controlled variable-gain amplification for coaxial line driving applications [see p. 1]. Changing the output configuration of the AD8322 to single ended operation would not render it unfit for this purpose. See "Gain Programmable CATV Line Driver: AD8321" (of record). Thus, even if the output stage as described in the preferred embodiment of Tam were substituted for the output stage of Analog Devices, Inc., the prior art would not be rendered unfit for its intended purpose.


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